§ 60.234

mass rate in metric ton/hr of phosphorus-bearing feed using a flow monitoring device meeting the requirements of paragraph (a) of this section and then by proceeding according to $\S 60.234(b)(3)$.

(c) The owner or operator of any triple superphosphate plant subject to the provisions of this part shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of ±5 percent over its operating range.

[40 FR 33156, Aug. 6, 1975, as amended at 54 FR 6670, Feb. 14, 1989]

§ 60.234 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standards in §60.232 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi}\right) / (PK)$$

where:

 $E{\rm =emission\ rate\ of\ total\ fluorides,\ g/metric} \\ {\rm ton\ (lb/ton)\ of\ equivalent\ } P_2O_5\ feed.$

 $\begin{array}{c} C_{si} {=} concentration \quad of \quad total \quad fluorides \quad from \\ emission \ point \ ``i,'' \ mg/dscm \ (mg/dscf). \end{array}$

 Q_{sdi} =volumetric flow rate of effluent gas from emission point ''i,'' dscm/hr (dscf/hr).

N=number of emission points in the affected facility.

P=equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).

K=conversion factor, 1000 mg/g (453,600 mg/lb)

(2) Method 13A or 13b shall be used to determine the total fluorides concentration $(C_{\rm si})$ and volumetric flow rate $(Q_{\rm sdi})$ of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

 $P = M_p R_p$

where:

M_p total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p=P₃O₅ content, decimal fraction.

- (i) The accountability system of $\S 60.233(a)$ shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference—see \$60.17) shall be used to determine the P_2O_5 content (R_p) of the feed.

[54 FR 6670, Feb. 14, 1989; 54 FR 21344, May 17, 1989]

Subpart X—Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities

§ 60.240 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each granular triple superphosphate storage facility. For the purpose of this subpart, the affected facility includes any combination of: Storage or curing piles, conveyors, elevators, screens and mills.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after October 22, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977]

§ 60.241 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) *Granular triple superphosphate storage facility* means any facility curing or storing fresh granular triple superphosphate.
- (b) Total fluorides means elemental fluorine and all fluoride compounds as measured by reference methods specified in §60.244, or equivalent or alternative methods.

Environmental Protection Agency

- (c) Equivalent P_2O_5 stored means the quantity of phosphorus, expressed as phosphorus pentoxide, being cured or stored in the affected facility.
- (d) Fresh granular triple superphosphate means granular triple superphosphate produced within the preceding 72 hours.

[40 FR 33156, Aug. 6, 1975, as amended at 62 FR 18280, Apr. 15, 1997]

§ 60.242 Standard for fluorides.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain total fluorides in excess of 0.25 g/hr/metric ton of equivalent P_2O_5 stored (5.0 × 10⁻⁴ lb/hr/ton of equivalent P_2O_5 stored).
- (b) No owner or operator subject to the provisions of this subpart shall ship fresh granular triple superphosphate from an affected facility.

[40 FR 33156, Aug. 6, 1975, as amended at 62 FR 18280, Apr. 15, 1997]

§ 60.243 Monitoring of operations.

- (a) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall maintain an accurate account of triple superphosphate in storage to permit the determination of the amount of equivalent P_2O_5 stored.
- (b) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall maintain a daily record of total equivalent P_2O_5 stored by multiplying the percentage P_2O_5 content, as determined by $\S 60.244(c)(3)$, times the total mass of granular triple superphosphate stored.
- (c) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across any process scrubbing system. The monitoring device shall have

an accuracy of \pm 5 percent over its operating range.

(d) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall develop for approval by the Administrator a site-specific methodology including sufficient recordkeeping for the purposes of demonstrating compliance with §60.242 (b).

[40 FR 33156, Aug. 6, 1975, as amended at 54 FR 6671, Feb. 14, 1989; 62 FR 18280, Apr. 15, 1997]

§ 60.244 Test methods and procedures.

- (a) The owner or operator shall conduct performance tests required in §60.8 only when the following quantities of product are being cured or stored in the facility.
- (1) Total granular triple superphosphate is at least 10 percent of the building capacity, and
- (2) Fresh granular triple superphosphate is at least 6 percent of the total amount of triple superphosphate, or
- (3) If the provision in paragraph (a)(2) of this section exceeds production capabilities for fresh granular triple superphosphate, fresh granular triple superphosphate is equal to at least 5 days maximum production.
- (b) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (c) The owner or operator shall determine compliance with the total fluorides standard in §60.242 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi}\right) / (PK)$$

where:

E=emission rate of total fluorides, g/hr/metric ton (lb/hr/ton) of equivalent P_2O_5 stored.

 C_{si} =concentration of total fluorides from emission point ''i,'' mg/dscm (mg/dscf).

Q_{sdi}=volumetric flow rate of effluent gas from emission point ''i,'' dscm/hr (dscf/hr).

N=number of emission points in the affected facility.

P=equivalent P_2O_5 stored, metric tons (tons).